

22077
Z/039/61/022/006/002/005
D225/D305

Impregnated cathode

Operation of the Barium Aluminate Impregnated Cathode. Journal of Applied Physics 28 (1957), no 12, p 1468.

ASSOCIATION: Výzkumný ústav pro vakuovou elektrotechniku, Praha
(Research Institute for Vacuum Electro-Engineering,
Prague).

SUBMITTED: February 16, 1961

X

Card 9/9

VYSLOUZIL, F., MUDr.

Some conditions for increased accuracy of statistical data on incapacity for work. Cesk. sdav. 13 no.6:307-309 1965.

1. Vyzkumny ustav organizace zdravotnictvi, Praha.

101 AND 102 GROUPS

PROCESSES AND PROPERTIES GROUP

8

ca

New data on lepidolite from Rožná, Moravia. JOSEF ŠKEMANINA AND OSMAR VERNER. *Acta Soc. Sci. Nat. Moraviae* (Brno) 8, Pt. 2, 25-31 (1928); *Mineralog. Abstracts* 370-80. Analyses of pink lepidolite from Rožná gave: SiO_2 47.63, Al_2O_3 28.69, FeO trace, FeO 0.33, MnO 0.75, MgO 0.18, CaO 0.33, Na_2O 1.08, K_2O 11.20, Li_2O 4.87, F 6.81, H_2O (+105°) 1.20, H_2O (-105°) 0.31%, the analysis agreeing with $\text{H}_2\text{Li}_2(\text{K}, \text{Na})_2\text{Al}_2\text{Si}_2\text{O}_{10}\text{F}_2$.

J. F. SCHAIERER

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200

VYSLOUZIL, J.

"Frantisek Bartos' work in the field of folkloristic research."

p. 110. (Cesky Lid., Vol 43, No. 3, 1956, Prague, Czechoslovakia)

GEOGRAPHY & GEOLOGY

Monthly Index of East European Accessions (EEAI) LC, Vol 7, No. 12, Dec 58

ENDRYS, Jiri; VYSLOUZIL, Josef

A possibility of phonocardiographic differentiation between flint and diastolic murmurs in mitral stenosis with the aid of amyl nitrite and noradrenalin. Sborn. ved. prac. lek. fak. Karlov. univ. (Hrad Kral) 4 no.4:405-411 '61.

1. Kardiochirurgické středisko a chirurgická klinika; prednosta prof. MUDr. J. Procházka.

(PHONOCARDIOGRAPHY)	(MITRAL STENOSIS diag)
(NOREPINEPHRINE pharmacol)	(NITRITES pharmacol)

POLACEK, Premysl; STEINHART, Leo; ENDRYIS, Jiri; VYSLOUZIL, Josef

Muscular bridges and loops over coronary arteries in coronariograms.
Cesk. morf. 10 no.3:251-258 '62.

1. Departments of Anatomy, Radiology and Surgery Charles' University
Medical Faculty, Hradec Kralove.
(CORONARY VESSELS radiography) (ANGIOGRAPHY experimental)

ENDRYS, Jiri; KVASNICKA, Jiri; STEINHART, Leo; VORTEL, Vladimir; BRZEK, Vladimir; VYSLOUZIL, Jan; KRAVEC, Miroslav.

Method of measuring the volume of flow through broncho-pulmonary anastomoses. Sborn. ved. prac. lek. fak. Karlov. Univ. (Hrad. Kral.) 6 no. 3: 219-228 '63.

1. Kardiochirurgické středisko (prednosta: prof. MUDr. J. Procházka); I. interní klinika (prednosta: prof. MUDr. J. Rehor); Radiologická klinika (prednosta DrSc., prof. MUDr. J. Bastecky); Patologicko-anatomický ústav (prednosta DrSc., MUDr. A. Fingerland) a Chirurgická klinika (prednosta: prof., MUDr. J. Procházka), Universita Karlova.

*

PROCHAZKA, J.; ENDRYŠ, J.; VYŠLOUZIL, J.

Measurement of intracardiac pressures during surgery, and comparison of values with the anatomical findings at the mitral orifice. Cor vasa 4 no.3:219-224 '62.

1. The Cardiosurgical Centre and Surgical Clinic, Charles University, Hradec Kralove.

(MITRAL STENOSIS surgery) (HEART CATHETERIZATION)

SKACH, Antonin, inz.; VYSLOUZIL, Jiri, inz.

Maintenance of noncontact rails. Zel dop tech 12 no.5:Suppl.
no.5:1-8 '64.

VYSLOUZIL, Jiri, inz.

Rammed flame welding of rails. Zel dop tech 11 no. 12:
369 '63.

VYSLOUZIL, J., inz.; KOPIC, J.; VESELY, Karel

Protection from falling in mounting panel houses. Poz stavby 11 no.2:
104-106 '63.

1. Vojenske stavby, Praha (for Vyslouzil and Kopic). 2: Vyzkumny
ustav stavebni výroby (for Vesely).

VYSLOUZIL, Jiri, inz.

The PRMS mobile welding unit. Zel dop tech 12 no.11:292-
294 '64.

VYSLUZIL, J.; ENDRYŠ, J.; STEINHART, L.

Congenital supraaortic stenosis with mitral insufficiency. Cor. vasa 6 no.2:164-167 '64

1. Cardiosurgical Centre and Department of Radiology, Faculty of Medicine, Caroline University, Hradec Kralove, Czechoslovakia.

*

VYSLOUZIL, Pavel

Direct connection of the Aritma puncher with the recorder of processing machine coordinates. Geod kart obzor 9 no.7:189-190 JI '63.

1. Geodeticky a topograficky ustav, Praha.

VYSLOUŽIL, S.; SVERCL, J.

Automatic welding under flux in the production of thin-sheet pressure vessels. p. 179.

ZVARANIE. (Ministerstvo hutneho prumyslu a rúdnych bani a Ministerstvo strojárstva)
Bratislava, Czechoslovakia. Vol. 8, no. 6, June 1959.

Monthly list of East European Accessions (EEAI) Vol. 9, no. 1, Jan. 1960.

Uncl.

VYSLOUZIL, Zdenek, inz.

Electric resistance heating in the upsetting of stem-shaped steel components. Stroj vyr ll no.5:246-249 My '63.

1. Zavody presneho strojirenstvi, n.p., Gottwaldov.

VYSLOUZIL, Zdenek, inz.

"Mechanics" by Z. Oppl, R. Tepliceck. Reviewed by Zdenek Vyslouzil.
Stroj vyr 13 no.3:231 Kr '65.

~~Source: given name~~

9

Country: Czechoslovakia

Academic Degrees:

Affiliation: Tuberculosis Research Institute (Vyzkumny ustav tuberkulózy), Prague. Director: docent Dr Rudolf KŘIVÁNEK.

Source: Prague, Rozhledy v Tuberkulóze a v Nemocích Plicních, No 4, Apr 61, pp 271-275

Data: "A Contribution to the Question of Strain on the Right Heart and on Pulmonary Circulation, Following Pneumonectomy for Tuberculosis."

Co-authors: LUKES, M. WIDEMSKY, J. DEJDAR, R. VALACH, A.

Note: Four affiliations are given for the five (including VYSLOUZIL) co-authors, in the following order:

1. Institute for Postgraduate Medical Training (Ustav pro doskolovani lekaru). Director: professor Jan MICHLECH, doctor of medical sciences.
 2. Chair of Pathisicology (Katedra ftizeologie). Head: docent Dr Rudolf KŘIVÁNEK.
 3. Tuberculosis Research Institute, [see above].
 4. Institute for Circulatory Diseases (Ustav pro choroby cechu krevního), Prague-Krc. Director: professor Dr K. WEER.
- Except for VYSLOUZIL's mail address (Tuberculosis Research Institute), there is no clue to the affiliation or affiliations of the individual co-authors.

GPO 961543

SS-10000, Given Name

7

Country: Czechoslovakia

Academic Degrees:

Affiliation: Tuberculosis Research Institute (Vyzkumny ustav tuberkulozy), Prague. Director: docent Dr R. [Rudolf] KRIVICKA.

Source: Prague, Rozhledy v Tuberkuloze a v Nemocich Plicnich, No 5, May 61, pp 363-375

Data: "The Significance of Examining the Pulmonary Circulation prior to the Surgical Treatment of Tuberculosis"

Co-authors: LUKES, M. WIDELSKY, J. DEJDAR, R. VALACH, A.

Note: Four affiliations are given for the five (including VYSLOUZIL) co-authors, in the following order:

1. Institute for Postgraduate Medical Training (Ustav pro doskolovani lekaru). Director: professor Jan KROBLOCH, doctor of science.
2. Chair of Pathiology (Katedra Patologie). Head: docent Dr R. KRIVICKA.
3. Tuberculosis Research Institute [see above].
4. Institute for Circulatory Diseases (Ustav pro choroby obehu krevniho), Prague-Krc. Director: professor K. WABER.

Except for VYSLOUZIL's mail address (Tuberculosis Research Institute), there is no clue to the affiliation or affiliations of the individual co-authors.

KASALICKY, J.; VALACH, A.; DEJDAR, R.; KUBAT, K.; WIDIMSKY, J.; VYSLOUZIL, Z.;
LUKES, M.

Cor pulmonale in tuberculosis. Rev. czech. med, 8 no.3:164-170 '62.

1. Institute for Cardiovascular Research, Prague-Krc Director: Doc.
Dr. J. Brod, D.Sc. Tuberculosis Research Institute, Prague-Bulovka
Director: Doc. Dr. R. Krivinka.
(TUBERCULOSIS, PULMONARY) (PULMONARY HEART DISEASE)

KASALICKY, J.; DEJDAR, R.; VYSLOUZIL, Z., LUKES, M.

The effect of pendiomide (Giba) on the greater and lesser circulations of patients with chronic pulmonary disease. Cor vasa 5 no.2:120-127 '63.

1. Institute for Cardiovascular Research and the Institute for Tuberculosis Research, Prague.

(PULMONARY CIRCULATION)
(SILICOSIS) (BRONCHITIS)

(TUBERCULOSIS, PULMONARY)
(AZAMETHONIUM COMPOUNDS)

VYSLOUZIL, Zdenek (Praga, Czechoslowacja)

Pulmonary circulation and overloading of the right ventricle
of the heart in tuberculosis. Gruzlica 31 no.6:551-554 Je'63.

*

VYSNYI, L.; FABOK, V.

"Automatic remote control and protection of the multimotor drive." p. 120

TECHNICKA PRACA. (Mada vedeckych technickych spolocnosti pri Slovenskej akademii vied) Bratislava, Czechoslovakia, Vol. 7, no. 3, 1955.

Monthly List of East European Accessions Index (EEAI) LC, Vol. 8, No. 9, Sept. 1959

Uncl.

VYSOCKANSKY, M.

"Dynamic Characteristics of Electron Tubes; A Mathematical Solution of the Problem," P. 401. (TECHNICKA IPACA, Vol. 6, No. 7, July 1954, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions, (EFAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

VYSOCANSKY, M.

Universal source of power for an amateur laboratory. p. 627.
TECHNICKA PRACA, Bratislava, Vol. 6, no. 10, Oct. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

VISOCHANSKAYA, V.P.; DZHANGIR'YANTS, D.A.; KOLPAKOV, V.B.

Hydrochemical indicators of the presence of oil in Upper Albian
sediments of the Emba artesian basin. Trudy Inst. geol. i geofiz.
AN Kazakh. SSR 1:99-103 '63. (MIRA 16: 7)
(Emba region—Petroleum geology)
(Geochemical prospecting)
(Emba region—Water, Underground)

SDELOVACI TECHNIKA (Communication Engineering, Czechoslovakia)
Vol 2, No. 8, August, 1954

Vysokovsky, M.
Radio waves in astronomy.

By J. Filipek

Problems of manufacture of receiver tubes (in Czechoslovakia).

By V. Kratochvil

New oscillator circuit.

Discussion of the circuit described in "Radio and Television
News" 1953, November, p. 107.

By S. Vojtasek

238

Graphical solution of starter circuits (a few practical
solutions).

By M. Vysocansky

240

VYSOCHANSKIY, A. S.

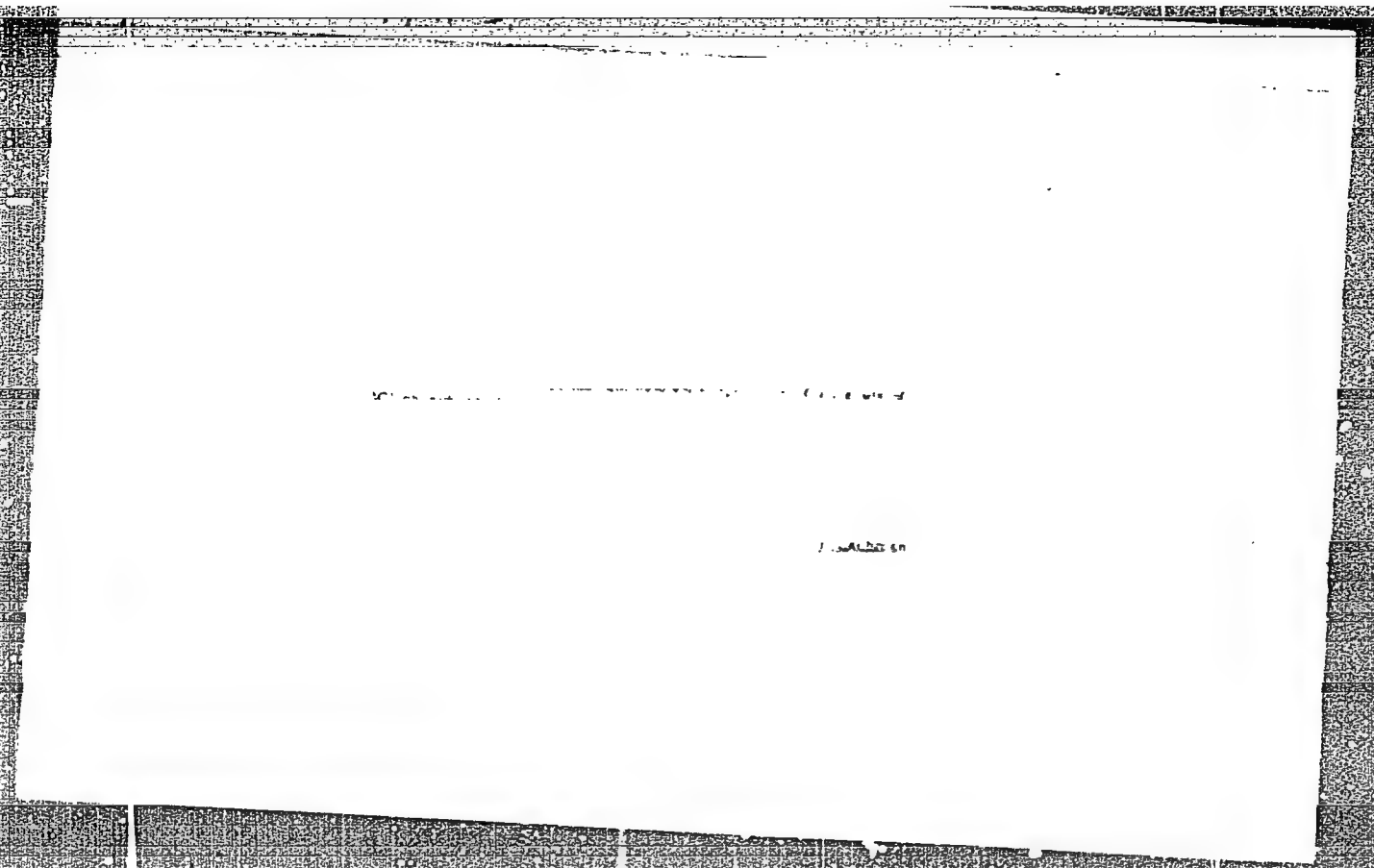
"Light Absorption and Photoluminescence of Thallium Halides." Cand
Phys-Math Sci, Odessa U, Odessa, 1954. (RZhFiz, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001961410020-7



APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001961410020-7"

AUTHOR: Vysochanskiy, A. S.

51-3-18/24

TITLE: On photoluminescence of thallium bromide. (O fotolyumin-
estsentsii bromistogo talliya).

PERIODICAL: "Optika i Spektroskopiya" (Optics and Spectroscopy),
1957, Vol.2, No.3, pp.387-388 (U.S.S.R.)

ABSTRACT: Thallium bromide is similar in many respects to silver bromide and the properties of the former are of interest in the theory of photographic processes. Emission and absorption spectra of sublimated layers of thallium bromide were studied. The bromide was prepared from chemically pure and triply recrystallized $TlNO_3$, KBr and NH_4Br . The preparation was carried out in darkness since thallium bromide is affected by light. The samples were in a form of sublimates or layers melted between quartz plates or in powdered form. Emission spectra were recorded photographically and using a visual spectrophotometer. Absorption spectra were measured on a Beckmann spectrophotometer from 2200 to 4600 Å. Absorption of thallium bromide on quartz base was compared with quartz alone. In addition to the known absorption maxima at 2390 and 2730 Å, two more at 3750 and 4000 Å were found. The latter two maxima are enhanced by ultraviolet irradiation; at higher light intensity a maximum at 4200 Å appears but the sample

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On photoluminescence of thallium bromide. (Cont.)

then ceases to be luminescent. Both on sublimation and on ultraviolet irradiation thallium bromide partially decomposes with evolution of Br. This indicates that additional absorption bands are due to excess of thallium, especially since treatment of the illuminated samples with Br decreases or destroys additional absorption. Emission occurs only below -160 C; a green band with a maximum of 5300 Å and a red one with a maximum at 6400 Å appear. Illumination weakens the green band and strengthens the red band; stronger illumination depresses emission generally and destroys the green band. The author concludes that thallium bromide is a crystal phosphor in which excess Tl serves as an activator. At low concentrations the excess Tl green emission predominates. With increase of Tl content red emission and green emission both reach their optima. With high Tl content a concentration quenching of luminescence occurs and centres consisting of groups of Tl atoms are formed. These centres cause fine structure in the absorption spectrum up to 7400 Å. On treatment with Br the excess of Tl is decreased and luminescence appears again. There are 2 figures showing the absorption and emission spectra and 4 references, two of which are Slavic.

Card 2/3

1
On photoluminescence of thallium bromide. (Cont.)

SUBMITTED: September 5, 1956.

51-3-18/24

AVAILABLE:

Card 3/3

27746

S/058/61/000/007/028/086

A001/A101

24.3500

AUTHOR: Vysochanskiy, A.S.

TITLE: On photoluminescence of thallium iodide

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 154, abstract 7V414
("Nauchn. zap. kafedr matem., fiz. i yestestvozn. Odessk. gos. ped.
in-t", 1959, v. 24, no. 1, 50 - 51)

TEXT: The introduction of a superstoichiometrical excess of Tl causes the appearance of new bands in the TlI absorption spectrum with maxima at 3850 and 4400 Å. Spectra of TlI luminescence were observed in preparation with pure cubic structure and in preparations of cubic structure with hexagonal interstices at strong cooling (down to -183°C) under action of ultraviolet radiation of a mercury vapor lamp. At the -183°C temperature only those TlI specimens which contain a stoichiometric excess of Tl show luminescence. Preparations with cubic lattice have emission bands at ~ 5450 and 6500 Å , and preparations of cubic structure with hexagonal interstices have in addition bands ~ 5050 and 5950 Å . A conclusion has been drawn from the comparison of spectra of absorption and emission that excessive Tl plays the role of activator in TlI. G. Llyd'ya
[Abstracter's note: Complete translation]
Card 1/1

VYSOCHANSKIY, B.L.

Efficient form of bank protecting structures. Trudy Inst.vod.
khoz.i energ. AN Kir.SSR no.5:43-47 '59. (MIRA 13:5)
(Shore protection)

ARTAMONOV, K.F.; VYSOCHANSKIY, B.L.

Regulating rock-fill installations. Izv. AN Kir. SSR. Ser.
est. 1 tekhn. nauk 5 no.3:129-139 '63. (MIRA 16:11)

VYSOCHANSKIY, I.P., uchitel'

Young naturalists make visual aids on biology. Biol. v shkole no.3:73-75 My-Je '60. (MIRA 13:7)

1. Nesterovskaya vos'miletnyaya shkola No 1, Nesterovskogo rayona, I'vovskoy oblasti.

(Biology--Audio-visual aids)

VYSOCHANSKIY, M.

3

VYSOCHANSKY, M., MUKHIN, S. V., TSUN-TSIN, PIN., RIKHVITSKY, S. V.,
and SEMENYUSHKIN, I. N.

"Multichannel Coincidence System with Short Pules Intervals"

Joint Institute of Nuclear Reseach, Dubna, USSR.

report submitted for the IAEA conf. on Nuclear Electronics. Belgrade, Yugoslavia
15.20 May 1961

VYSOCHANSKIY, M.; MUKHIN, S.V.; PIN TSUN'-TSIN [P'ing TS'un-ch'ing];
RIKHOVITSKIY, S.V.; SEMENYUSHKIN, I.N.

Multichannel coincidence circuit with a short separation time.
Prib.i tekhn.eksp. 6 no.5:67-71 9-0 '61. (MIRA 14:10)

1. Ob'yedinennyy institut yadernykh issledovaniy.
(Electronic circuits)

L. 47073-65 EWT(1)/EGC(h)-2/EWA(h) Feb

112/0120/65/000/002/0038/0091

AUTHOR: Vysochanskiy, M.; Mukhin, S. V.; Rukhvitskiy, S. V.;

Semenyukhin, I. M.

SOURCE: Prihory i tekhnika eksperimenta, no. 2, 1965, 88-91

who took part in the measurements." Orig. art. has 5 figures and 2 formulas.

Card 1/2

ACCESSION NR AP5011876

ASSOCIATION Ob"yedineniye institut vadernykh issledovaniy (Joint Institute of

SUBM

Card

Card 2/2

RAZUVAYEV, G.A.; LATYAYEVA, V.N.; VYSHINSKAYA, L.I.; VYSHINSKIY, N.N.

New monocyclopentadienyl compounds of titanium. Dokl. AN SSSR
156 no. 5:1121-1123 Je '64. (MIRA 17:6)

1. Nauchno-issledovatel'skiy institut khimii pri Gor'kovskom gosudarstvennom universitete im. N.I. Lobachevskogo.
2. Chlen-korrespondent AN SSSR (for Razuvayev).

VYSOCHANSKII, S.H.

School Gardens

Work of a group of young melon growers. Est. v shkole, No. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952, UNCLASSIFIED

VYSOCHANSKIY, V.S., inzh.

Concerning the accuracy limit of the tension regulators of the
reels of cold rolling mills. Elektrichestvo no.6:9-14 Je '62.

(MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektromekhaniki.
(Rolling mills)

8(3)

AUTHOR: Vysochanskiy, V. S., Engineer

SOV/105-58-12-11/28

TITLE: On the Change in Load Characteristics of Magnetic Amplifiers
(Ob izmenenii nagruzochnykh kharakteristik magnitnykh usili-
teley)

PERIODICAL: Elektrichestvo, 1958, Nr 12, pp 49 - 51 (USSR)

ABSTRACT: The magnetic amplifiers show a great number of deficiencies:
1) The current continuously flowing in the loaded circuit
of the amplifier cannot be inferior to a definite value. 2)
When a change occurs in the polarity of the pilot signal the
load circuit of the amplifier will alter its form; this might
cause the control system to operate incorrectly. This is a
study of a circuit diagram of a magnetic amplifier with a
standard resistor inserted into its load circuit. This circuit
diagram makes it possible to entirely eliminate the above-
mentioned deficiencies of the amplifiers even if the cores are
made of common electrotechnical steel. The analysis of the results
obtained by the circuit investigation suggests that inserting
a standard resistor into the load circuit of the magnetic

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On the Change in Load Characteristics of Magnetic
Amplifiers

SOV/105-58-12-11/28

amplifier is a very flexible and efficient means of altering the
form of the load characteristic of the amplifier. There
are 6 figures and 3 Soviet references.

SUBMITTED: May 12, 1958

Card 2/2

1.1300

24079

S/144/61/000/007/002/003
D229/D303

AUTHOR: Vysochanskiy, V.S., Engineer

TITLE: Control of tension between rolls in cold-rolling mills

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Elektromekhanika, no. 7, 1961, 93 - 102

TEXT: A device is described for controlling the tension of strips between adjacent rolls in continuous strip rolling mills. This is important for obtaining an even thickness of strip, for avoiding strip ruptures and for further automation of the milling process. The device eliminates the functional relationship between the tension of strips and velocity ratio of adjacent rolls and keeps the tension constant. The synchronization of rolls is still required, but greater (by a factor of 12.5) tolerance can be allowed in the self-regulation of speed. The device is based on strip "storing", (see Fig. 1). A pressure roller moves between the two support rollers 1, creating a reserve of strip and evening out the tension of

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D229/D303

Control of tension between ...

the strip. If the reserve is small, the mobile roller acts little on the strip, but its action increases with reserve of strip. Such a pull characteristic is possessed by an electromagnet with a rotary armature, hence the device incorporates such an electromagnet. The pull of the roller does not exceed 12 % of the strip tension. Hence the required maximum of magnetic moment is

$$M = 0.12 T \cdot R = 0.12 \cdot 20000 \cdot 50 = 120000 \text{ kgcm.} \quad (4)$$

The diameter of the mobile roller is 300 mm. The dimensions of the electromagnet were calculated and a model electromagnet constructed which was laboratory-tested. There was good agreement between calculated values and experiment. A control system incorporating the above device was used for the 5-roller mill MMK. It operates as follows: A servomechanism on the electromagnet transmits the voltage difference (between the voltage corresponding to the actual tension of the strip and the voltage corresponding to the standard tension) to an amplifier which controls the voltage of the roller-motor generators. The device eliminates dynamic, as well as

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Control of tension between ...

S/144/61/000/007/002/003
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static tension deviations; the dynamic error constitutes only 0.344 % and is negligible. In conclusion, the introduction of the device would boost productivity. The application range of the device includes also hot rolling of thin sheets, and mechanisms which work strip, bands and wire. There are 5 figures, 1 table and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: W.C.F. Hessenberg, M.A. Cantab, Jenkin, Some Features of Tandem Mill Theory "Sheet metal Industries", October 1955, vol. 32, no. 342.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute)

SUBMITTED: January 30, 1961

Card 3/4

VYSOCHANSKIY, V.S., inzh.

New type of a tension regulating device. Vest. elektroprov. 32
no.10:38-41 0 '61. (MIRA 14:9)
(Tensiometers)

L 3108-66 EWT(d)/EWT(m)/ENP(1)/ENP(c)/ENP(v)/I/ENP(t)/ENP(k)/ENP(h)/ENP(b)/ENP(1)
 UR/0105/64/000/009/0094/0055
 ACCESSION NR: AP5026358 JD

AUTHOR: Tavetkov, V. A.; Birzniyek, L. V.; Vysochanskiy, V. S.; Shakhnazaryan, Yu. M.; Kazanskiy, V. Ye.; Kapuntsov, Yu. D.; Salekh, M. A. Kh.; Frumkin, A. L.; Bakhovtsov, B. A.

TITLE: Dissertations in competition for the academic degree of doctor of technical sciences

SOURCE: Elektrichestvo, no. 9, 1964, 94-95

TOPIC TAGS: electric engineering, electric power engineering, electric equipment, electric distribution equipment, electric rotating equipment, automatic control, automatic control system

Abstract: The following defended dissertations at the Moscow Power Engineering Institute: V. A. TSVETKOV, 14 December 1962, on the theme "Autoparamagnetic Phenomena and Surges in Three-Phase Circuits which Contain Ferromagnetic Equipment," his official opponents -- Doctor of Technical Sciences, Professor V. A. TAFT and Candidate of Technical Sciences, Lecturer L. P. DOKHOVSKAYA; L. V. BIRZNIYEK, 4 January 1963, on the theme "Electromagnetic Processes in Multistage Voltage Regulation Circuits in Electric

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*NOT AUTHOR'S FULL ARTICLE

L 3108-66

ACCESSION NR: AP5026358

Rolling Stock with Semiconductor Rectifiers," his official opponents -- Doctor of Technical Sciences B. N. TIKHOMENOV and Candidate of Technical Sciences, Lecturer L. M. TRAKHTMAN; V. S. VYSOCHANSKIY, 18 January 1963 on the theme "Methods for Controlling the Strip Tension at the Reel of a Cold Rolling Mills," his official opponents -- Doctors of Technical Sciences N. P. KUNITSKIY and N. N. DRUZHININ; Yu. M. SHAKHNAZARYAN, 18 January 1963, on the theme "Approximate Methods for Analysis of Non-Stationary Asynchronous Conditions in Electrical Systems," his official opponents -- Doctor of Technical Sciences, Professor L. G. MALIKONYANTS and Candidate of Technical Sciences, Lecturer N. I. SOKOLOV; V. Ye. KAZANSKIY, 18 January, on the theme "Some Problems in Automation and Remote Control of Power Systems," his official opponents -- Doctor of Technical Sciences, Professor I. A. SYROMYATNIKOV and Candidate of Technical Sciences V. K. SPIRIDONOV; Yu. D. KAPUNTSOV, 18 January 1963, on the theme "An Asynchronous Electric Drive with Non-Symmetric Connection of the Saturation Chokes in the Stator Circuit," his official opponents -- Doctor of Technical Sciences V. Ye. BOGOLYUBOV and Candidate of Technical Sciences, Lecturer D. N. LIPATOV; M. A. Kh. SALEKH, 22 February 1963, on the theme "Theoretical Study of the Operation of Minature Two-Phase Asynchronous Machines when the Supply Voltage is not Sinusoidal," his official opponents -- Doctor of Technical Sciences, Professor A. I. BERTINOV and Candidate of Technical Sciences,

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ACCESSION NR: AP5026358

10

Lecturer P. Yu. KAASIK; A. L. FRUMKIN, 8 March 1963, on the theme "A Theoretical and Experimental Study of the Permeability of Anisotropic Thin Magnetic Films," his official opponents -- Doctor of Physical and Mathematical Sciences, Professor R. V. TELESNIN and Candidate of Technical Sciences, Lecturer P. P. MESYATSEV; B. A. BAKHOVTSOV, 19 April 1963, on the theme "Synthesis of Systems for Automatic Control of Starting and Stopping of Electric Drives," his official opponents -- Doctor of Technical Sciences, Professor A. S. SANDLER and Candidate of Technical Sciences, Lecturer Yu. Ye. NITUSOV. At the Moscow Higher Technical Academy (Imeni Bauman) -- G. A. NIRONOV, 10 December 1962, on the theme "A Method for Experimental Programming of Electronic Digital Computers," his official opponents -- Doctor of Physical and Mathematical Sciences, Professor L. A. JYUSTERNIK and Candidate of Technical Sciences, V. Ya. PETROV. At the All-Union Electrotechnical Institute im. Lenin -- V. A. VOL'KENAU, 11 December 1962, on the theme "Conductivity of Carborundum," his official opponents -- Doctor of Technical Sciences, Professor V. V. BURGSDORF and Candidate of Technical Sciences, D. V. SHISHMAN. At the Academy of Municipal Economy im. Pamfilov -- V. A. KOZLOV, 14 January 1963, on the theme "Problems in the Use of Closed Systems for Municipal Electrical Networks," his official opponents -- Professor P. G. GRUDINSKIY and Candidate of Technical Sciences, Lecturer P. P. VORONTSOV.

Card 3/4

L 3108-66

ACCESSION NR: AP5026358

At the All-Union

Scientific Research Institute of Electromechanics -- L. Ya. STANISLAVSKIY.

23 November 1962, on the theme "On Work in the Field of High Power Turbo-
generators and Hydrogenerators," his official opponents -- Doctor of Tech-
nical Sciences, Professor I. M. POSTNIKOV, Doctor of Technical Sciences

I. D. URUSOV and Candidate of Technical Sciences Yu. M. EL'KIND.
Research Institute of Railroad Transportation; V. D. TULUPOV, 21 December

1962, on the theme "Development and Investigation of a System for Auto-
matic Control of Rheostat Braking of Rectifier Electric locomotives," his
official opponents -- Doctor of Technical Sciences B. N. TIKHOMIROV and
Candidate of Technical Sciences B. G. KAMENETSKIY; V. D. MONTSEV, 21

December 1962, on the theme "Protection of Traction Motors from Short Cir-
cuit Currents During Regenerative Braking," his official opponents -- Doctor

of Technical Sciences, Professor V. Ye. ROZENFEL'D and Candidate of Tech-
nical Sciences L. M. TRAPHTMAN; A. V. KAMENEV, 11 January 1963, on the

theme "Study of Voltage Control Systems for Power Transformers in AC Electric
Locomotives with Rectifiers," his official opponents -- Doctor of Technical
Sciences, I. P. ISAYEV and Engineer Kh. Ya. BYSTRITSKIY.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 000

Card 4/4 SC

ENCL: 00

OTHER: 000

SUB CODE: EE, IE

JPRS

L. 09272-67 EMT(d)/EMP(v)/EMP(k)/EMP(h)/EMP(1)
 ACC NR: AP6029890 (A) SOURCE CODE: UR/0413/66/000/015/0051/0051
 29

INVENTORS: Vynochanskiy, V. S.; Solivanov, A. D.

ORG: none

TITLE: Device for controlling the current in the field windings of two dc electric motors. Class 21, No. 184325

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 51

TOPIC TAGS: electric motor, current stabilization

ABSTRACT: This Author Certificate presents a device for controlling the current in the field windings of two dc electric motors supplied from a common driver. The device is in the form of a bridge circuit, one diagonal of which is connected to the driver voltage, and the second--to an additional voltage source regulated as a function of the currents, voltages, or velocities of the motors (see Fig. 1). To simplify and increase the stabilization efficiency, the additional source has a flexible negative feedback winding connected by one end to the center tap of a voltage divider supplied from this voltage. The divider resistances are proportional to the resistances of the bridge arms. The second end of the winding is connected to the center tap of a voltage divider with equal resistances supplied from the driver.

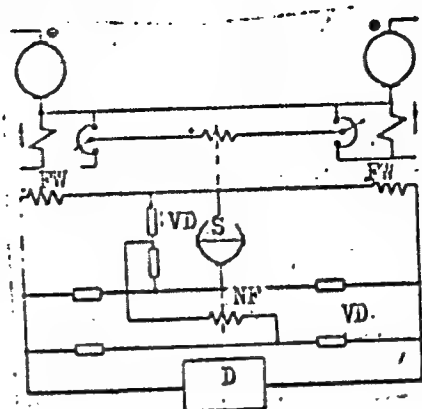
Card 1/2

UDC: 621.313.223.1.077.3

L 09272-67

ACC NR: AP6029890

Fig. 1. FW - field windings; D - driver; S - additional source; NF - flexible negative feedback winding; VD - voltage divider



Orig. art. has: 1 diagram.

SUB CODE: 09/ SUBM DATE: 17Jun64

VYSOCHENKO, N.P.

Rice growing in the southern Ukraine. Zemledelie 26 no.3:
31-33 Mr '64. (MIRA 17:4)

1. Glavnyy agronom kolkhoza "Radyans'ka Ukraina" Skadovskogo
proizvodstvennogo upravleniya, Khersonskoy oblasti.

VYSOCHIN, B.M.

BCNDAR', N.G. [Bondar, M.H.]; TIMOSHENKO, V.V. [Tymoshenko, V.V.];
VYSOCHIN, B.M. [Vysochyn, B.M.] (Dnipropetrovsk)

Natural vibrations of three-hinged parabolic arches [in Ukrainian
with summary in Russian]. Prykl.mekh. 3 no.4:467-471 '57.
(MIRA 11:2)

1.Dnipropetrovskiy institut inzheneriv transportu.
(Arches--Vibration)

BONDAR', N.G., prof., doktor tekhn.nauk; TIMOSHENKO, V.V., kand.tekhn,
nauk; VISOCHIN, B.M., kand.tekhn.nauk

Free vibrations in spans of hingeless arched bridges. Trudy
DIIT no.27:65-84 ' 58. (MIRA 12:1)
(Bridges, Arched--Vibration)

VYSOCHIN, Boris Avksent'yevich [Vysochyn, B.O.], kand.tekhn.nauk;
KALEKUST, Mikhail Yefremovich, inzh.; SEMENKO, M.V., red.;
SAVCHENKO, M.S., tekhn. red.

[Use of electric motors and start-protecting equipment]
Ekspluatatsiia elektrodvyhunyiv ta puskozakhysnoi aparatury.
Kyiv, Derzhnail'hospvydav URSR, 1960. 88 p. (MIRA 15:7)
(Electric motors--Starting devices)

VYSOCHIN, B. [Vysochnyn, B.], kard.tekhn.nauk; BELOUSOV, Ye. [Belousov, I.E.], arkhitektor; MAKHNOVSKIY, L. [Makhnovskiy, L.], inzh.

Built by students. Sil'.bud. 12 no.3:9-10 Mr '62. (MIRA 15:8)
(Lugansk Province--Farm buildings)

BABIY, A.A.; STARSHINOV, B.N.; ONOPRIYENKO, V.P.; NEZHNOV, G.N.; KUSHNAREV,
A.P.; KONAREVA, N.V.; *Prinimali uchastiye:* FLOROV, K.N.;
BUDINSKIY, G.M.; VISOCHIN, I.Ye.; OKOLELOV, A.N.; STRIGIN, V.I.;
AFANAS'YEV, A.A.; SAPRONOV, B.V.

Desulfurizing and dephosphorizing cast iron in the ladle.
Sbor.trud. UNIIM no.11:90-95 '65.

(MIRA 18:11)

VYSOCHIN, M.; NAGORNYI, A.

We will reach the 200 million figure! Pozh. delo 9 no.6:11-
12 Je '63. (MIRA 16:8)

1. Zamestitel' nachal'nika Upravleniya pozharnoy okhrany,
Rostov-na-Donu (for Vysochin). 2. Inspektor Upravleniya
pozharnoy okhrany, Rostov-na-Donu (for Nagornyy).

VYSOCHIN, V.A., inzh.; DEMINA, Ye.T., inzh.

Relation between the iodine number and the refraction coefficient of oils, and the application of this relation to the control and regulation of the hydrogenation process. Masl.-zhir.prom. 26
no.12:19-23 D '60. (MIRA 13:12)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya zhirovoy promyshlennosti Mosgorsovnarkhoza.
(Oils and fats) (Hydrogenation)

VYSOCHIN, V.A., inzh.; POPOVA, E.Ya., inzh.

Quantitative analysis of fatty acid mixtures by the chromatographic method on Russian made paper. Report No. 1. Masl.-zhir. prom. 27
no.9:21-24 S '61. (MIRA 14:11)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya zhirovoy
promyshlennosti Mosgorsovnarkhoza.
(Acids, Fatty--Analysis) (Paper chromatography)

SHEVCHENKO, A. (UB5CLX) (Chernovtsy); BASOV, V. (Moskva); PRILUTSKIY, G. (Pyatigorsk); ARKHIPOV, Ye. (Bugul'ma); VYSOCHIN, V. (Moskovskaya obl.); PRIKHUNOV, I. (Moskovskaya obl.); OBLASOV, G. (Kiyev); SMIRNOV, Yu. (UA4YB) (Kanash); KHOKHLOV, B. (Moskva); KHALDEYEV, A. (Przheval'sk); SKOBELEV, I. (Primorskiy kray); PROSKUROV, V. (Irkutsk); DOBRYNIN, Yu. (g.Ivanovo /obl./)

Exchange of experience. Radio no.10:22,26,29,32,37,40,44,46,58
0 '64. (MIRA 18:2)

L 28385-66 EWT(d)/EWP(1) LJP(c) GG/BB

ACC NR: AP5023385 (A) SOURCE CODE: UR/0317/65/000/005/0048/0051

AUTHOR: Vysochin, V. (Engineer, Captain)

22
B

ORG: None

TITLE: Self-education is made easier

SOURCE: Tekhnika i vooruzheniye, no. 5, 1965, 48-51

TOPIC TAGS: teaching machine, education

ABSTRACT: A special training device for self-instruction and self-examination is described. The device represents an electric circuit composed of a 12-w, 26-v, d-c motor and a system of relays, contactors, switches, signal lights, recording contacts, push-buttons, etc. The device is fed from the network through a rectifier. The material for study is recorded on a 120-mm film. The size of each frame is 9 x 12 cm. First, the problem under study is described including circuit diagrams, drawings, etc. Then, one question and five various answers, of which only one is correct, are presented at the end of the film frame. The student must select the right answer by pushing one of five circuit buttons. The right and wrong answers are checked by signal lamps. A wiring diagram of the circuit was presented and a detailed description of operating procedure was explained. Orig. art. has: 2 diagrams.

SUB CODE: 05 / SUBM DATE: None / ORIG REF: 000 / JTH REF: 000

Card 1/1 CC

L 43080-66 EWP(k)/EWT(m)/T/EWP(w)/EWP(t)/ETI IJP(c) JD/HW
ACG NR: AR6014374 (A,N) SOURCE CODE: UR/0137/65/000/011/D005/D005

AUTHORS: Kozlov, V. T.; Vysochin, V. D.

TITLE: Improvement of fatigue properties of wire cable by means of elastic-plastic elongation

SOURCE: Ref. zh. Metallurgiya, Abs. 11D30

REF SOURCE: Sb. Stal'n. kanaty. Vyp. 2. Kiyov, Tekhnika, 1965, 425-427

TOPIC TAGS: wire, wire product, fatigue strength, elongation

ABSTRACT: Results of investigations show that elastic-plastic elongation changes the character of the distribution of residual tensions. The fatigue properties of wire cables are notably improved by the proper choice of drawing technology and elongation stresses. 3 illustrations, 2 tables. L. Kochenova [Translation of abstract]

SUB CODE: 13,11,20

Card 1/1 *gd*

UDC: 621.771.001

BILICHENKO, N. Ya., dotsent, kand.tekhn.nauk; VISOCHIN, Ye. M., aspirant
ZAVGORODNIY, Ye. Kh., gornyy inzhener

Increasing the length of belt conveyers installed on inclines.
Vop. rud. transp. no.2:128-141 1957. (MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery)

KUZNETSOV, B.A., dotsent, kand.tekhn.nauk; VYSOCHIN, Ye. M., aspirant

Relation between the material conveyed and the performance of
continuous-operation conveyer scales. Vop. rud. transp. no.2:153-
158 1957. (MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery)
(Scales (Weighing instruments))

BILICHENKO, N.Ya.; ZAVGORODNIY, Ye.Kh.; VYSOCHIN, Ye.M.

Measuring torques of driving shafts. Izv.tekh. no.1:23-24 Ja
'60. (MIRA 13:5)
(Shafting) (Torque--Measurement)

VYSOCHIN, Ye. M., aspirant

Relation between the flexible qualities of a belt and the performance of conveyor scales. Vop. rud. transp. no.2:142-152 1957. (MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Scales (Weighing instruments))
(Conveying machinery—Testing)
(Belts and belting)

B.LICHENKO, N. Ya., kand.tekhn.nauk; VYSOCHIN, Ye. M., gornyy inzhener
ZAVGORODNYI, Ye, Kh., gornyy inzhener.

Increasing the length of inclined belt conveyers. Vop. rud.
transp. no.3:68-81 1959. (MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery)

POLYAKOV, N.S., prof.; BILICHENKO, N.Ya., dotsent; YISOOHIN, Ye.M.,
gornyy inzh.; ZAVGORODNIY, Ye.Kh., gornyy inzh.; LADYCHUK, N.I.,
gornyy inzh.; MATVEYEV, A.I., starshiy laborant

Flexible rollers for conveyer belts. Ugol' Ukr. 4 no.7:32-33
Jl '60. (MIRA 13:8)
(Conveying machinery) (Roller bearings)

BILICHENKO, N.Ya., kand, tekhn. nauk; VYSOCHIN, Ye.M., inzh.; ZAVGORODNIY, Ye.Kh.,
inzh.

Equipment for thorough testing of underground belt conveyors. Vop. rud.
transp. no. 4:126-146 '60. (MIRA 14:3)

1. Dnepropetrovskiy gornyy institut im. Artema.
(Conveying machinery)

POLYAKOV, I.S.; BILICHENKO, N.Ya., kand.tekhn.nauk, VYSOCHIN, Ye.M., inzh.;
ZAVBORODNIY, Ye.Kh., inzh.; LADYCHUK, N.I., inzh.; MATVEYEV, A.I.,
starshiy laborant

Designing and industrial testing of flexible supporting rollers of
belt conveyors. Vop.rud. transp. no.4:159-175 '60. (MIRA 14:3)

1. Dnepropetrovskiy gornyy institut im. Artema. 2. Chlen-korrespondent
AN USSR (for Polyakov).

(Conveying machinery—Equipment and supplies)

VYSOCHIN, Ya.M., inzh.

Theory of automatic conveyor scales. Vop.rud. transp.no.4:176-191 '60.
(MIRA 14:3)

1. Dnepropetrovskiy gornyy institut im. Artoma.
(Conveying machinery--Attachments)
(Scale (Weighing instruments))

BILICHENKO, N.Ya., kand. tekhn. nauk; VYSOCHIN, Ye.M., inzh.;
ZAVG(RODNIY, Ye.Kh., inzh.

Over-all studies of RTU-30 belt conveyors. Vop. rud. transp.
no.5:7-16 '61. (MIRA 16:7)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery)

BILICHENKO, N.Ya.; ZAVGORODNIY, Ye.Kh.; VYSOCHIN, Ye.M.; KLIMOV, V.V.

High-duty electric ring dynamometers. Izv.tekh. no.1:21-23 Ja'62.
(MIRA 2402)

(Dynamometer)

BILICHENKO, N.Ya., kand.tekhn.nauk; VISOCHIN, Ye.M., inzh.; ZAVGORODNIY,
Ye.Kh., inzh.

(operating conditions for rubberized conveyer belts. Vop. rud.
transp. no.6:3-13 '62. (MIRA 15:8)

.. Dnepropetrovskiy gornyy institut.
(Conveying machinery)

BILICHEIKO, N.Ya., kand.tekhn.nauk; ZAVGORODNIY, Ye.Kh., inzh.; VYSOCHIN,
Ye.M., inzh.

Overall studies of the KLS-1200 belt conveyor. Vop. rud. transp.
no.6:13-24 '62. (MIRA 15:8)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery)

BILICHENKO, N.Ya., dotsert; VYSOCHIN, Ye.M., kand.tekhn.nauk; ZAVGORODNIY,
Ye.Kh.; GOTOVTSEI, Yu.A., inzh.

Some deficiencies in the operation of pulling stations for belt
conveyors. Ugol' Ukr. 7 no.6:29-30 Jo '63. (MIRA 16:8)

1. Dnepropetrovskiy gornyy institut.

BILICHENKO, N.Ya., kand.tekhn.nauk; VISOCHIN, Ye.M., kand.tekhn.nauk;
ZAVGORODNIY, Ye.Kh., kand.tekhn.nauk; GOTOVTSEV, Yu.A., inzh.

(Comprehensive experimental studies of the KRU-350, KRU-260, and
KRU-260A mine conveyors. Vop. rud. transp. no.7:17-45 '63.
(MIRA 16:9)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery—Testing)

ZAVGORODNIY, Ye.Kh., kand.tekhn.nauk; BILICHENKO, N.Ya., kand.tekhn.nauk;
VYSOCHIN, Ye.M., kand.tekhn.nauk

~~Relaxation~~ of the propagation of an elastic wave in conveyor belts.
Vop. rud. transp. no.7:57-63 '63. (MIRA 16:9)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery—Elastic properties)

OSTROVSKIY, Semen Moiseyevich; PETRENKO, Yevgeniy Vasil'yevich;
KORENEV, Veniamin Grigor'yevich; BOYKO, A.A., retsenzent;
BELOSVETOV, .V., red.; VYSOCHIN, Ye.M., red.; DVOYNIN,
A.I., red.; DENISENKO, A.I., red.; LOKSHIN, B.S., red.;
MARSHAK, I.S., red.; MAYEROV, R.Ya., red.; NEKRASOVSK.,
Ya.E., red.; RAIUSHNYI, A.A., red.; RIPP, M.G., red.

[Handbook for Donets Basin miners] Spravochnik shakhtera
Donbassa. Moskva, Izd-vo "Nedra," 1964. 411 p.
(MIRA 17:7)

SOBOLEVSKAYA, N.A.; VYSOCHINA, G.I.

Study of flavonoids in the Altai representatives of the genus
Polygonum L. Rast.res. 1 no.3:367-369 '65.

(MIRA 18:10)

L. Sibirskiy botanicheskiy sad, Novosibirsk.

УЧЕБНИК

БЖ-

TABLE I BOOK INFORMATION

80/578

Author: A. M. Kozlov. Institute of Radiobiology and Atomic Physics.

Isotopicheskiye reaktivnyye organizmy na radiatsionnyye vozdeystviya (Study of Early Reactions of the Organism to Radiation Effects) Moscow, Izdatel'stvo AN SSSR, 1960. 220 p. Krasnaya zvezda. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut biologicheskoy fiziki.

Editor: E. M. Prud'homme, Corresponding Member, Academy of Sciences USSR; M. A. Publishing House: B. V. Gorkiy, Tech. Ed.: V. V. Volkova and Ye. V. Kabanov.

PREFACE: This book is intended for radiobiologists.

CONTENTS: This is a collection of nine articles by different authors on the effects of radiation on life processes. The following are discussed: the relationship between reflector mechanisms and disturbances in homeostasis; the partial elimination of total absence of homeostatic reactions under short irradiation; the primary treatment of the skin with roentgen; reflecting-induced changes in the central nervous system and the almost instantaneous advent of free physicochemical reactions following irradiation; changes in the stability of the erythrocyte level during the first several hours after irradiation; blood albumin changes after irradiation, occurring earlier than believed hitherto by scientists; and new and important data on tissue breathing and disturbances in the physicochemical properties of erythrocytes. E. M. Livshits, Doctor of Biological Sciences, is mentioned. Each article is accompanied by references.

Gamburyan, A. G. Changes in the Physicochemical Properties of Erythrocytes Under the Effect of Radiation	83
Blotkins, Y. B. Albumin Fractions in the Blood Plasma of Animals Exposed to Different Doses of X-rays	93
Yevseyeva, I. V. Effect of X-ray Irradiation on the Gas Balance of the Blood	113
Smirnov, A. B. On Changes in the Oxygen Content of Erythrocytes Under the Effect of Radiation	125
Alchukhlov, I. A. Characteristics of Physicochemical Changes in the Central Nervous System for Different Periods of Exposure to Radiation	147

AVAILABLE: Library of Congress

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22/10/60
1-2-60

5

L 13582-63

ENT(1)/ENT(m)/BDS AMD/AFFTC/ASD AR/K

ACCESSION NR: AP003722

8/0205/63/003/004/0494/0500

AUTHOR: Nysochik, I. V.

TITLE: Changes in the spectral character of oxyhemoglobin resulting from x-ray irradiation 19

SOURCE: Radiobiologiya, v. 3, no. 4, 1963, 494-500

TOPIC TAGS: radiobiological effect, blood chemistry, blood electron spectra, blood absorption spectra, oxygenation, oxyhemoglobin, blood irradiation, oxyhemoglobin spectrum, heme, globin

ABSTRACT: Rabbits and rats were subjected to total-body irradiation using an RUM-3 apparatus (180 kv, 15 mamp; filter, 0.5 mm Cu; dose rate, 21 r/min; total dose, 900-1300 r). Blood specimens from the auricular vein of rabbits, the jugular vein of rats, and the finger of a human subject were irradiated in vitro (180 kv, 15 mamp; no filter; distance, 13 cm; dose rate, 1400 r/min; total dose, 1, 5, 10, 20, and 30 k). Hemoglobin specimens were prepared from the blood of the irradiated rabbits and rats and the human blood irradiated in vitro and their electron spectra studied on an SF-4 spectrophotometer in the visible, near-ultraviolet, and near-infrared regions of the spectrum. Simultaneously oxygen and carbon monoxide incorporation curves were taken, hemoglobin concentrations

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L 13582-63

ACCESSION NR: AP3003922

0

were determined, and erythrocyte counts were made. Irradiation-induced changes appearing in the oxyhemoglobin spectrum immediately following irradiation persisted until death of the animal. These were as follows: 1) The maximum of the 342-m μ band shifts to 330 or 350 m μ , and two or three peaks or a single wide plateau appear in the Soret band in the 412-417-m μ region, representing the superposition of several bands close together in wavelength and intensity. 2) Absorption intensity increases in radiosensitive animals and decreases or shows very little change in radio-resistant animals. 3) Blood irradiation in vitro produced the same changes as total-body irradiation. 4) Absorption intensity increases considerably during irradiation with a 1000-r dose, probably as a result of resonance phenomena. Doses greater than 1000 r leave the absorption intensity practically unchanged or lower it. These changes were found in all samples whether irradiated in vivo or in vitro. 5) Changes observed in the oxyhemoglobin spectrum after irradiation are probably produced by the excitation of supplementary electron levels either of the iron in the heme, or of the nitrogen of the imidazole remnant of the histidine of the protein part of the molecule. This prevents the formation of secondary coordinate bonds between the iron of the heme and globin during oxygenation, making the incorporation of oxygen more difficult. Orig. art. has: 5 figures.

Associations: Inst. of Biological Physics,

Card 2/12

VYSOCHINA, I.V.

Change in the electron spectra of oxyhemoglobin solutions irradiated in vivo and in vitro. Radiobiologiya 3 no.1:147-149 '63.
(MIRA 16:2)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(OXYHEMOGLOBIN) (RADIATION—PHYSIOLOGICAL EFFECT)
(ELECTRONS—SPECTRA)

ID Nr. 996-1 24 June

RESPIRATION FUNCTION OF BLOOD IN RABBITS EXPOSED TO LETHAL
DOSES OF X-IRRADIATION (USSR)

Vysochina, I. V. Radiobiologiya, v. 3, no. 2, 1963, 204-210.

S/205/63/003/002/008/024

Twenty-five male rabbits weighing 3.0 to 3.5 kg were subjected to total-body x-irradiation with 900 to 1300 r from an PYM-3 apparatus (180 kv; 15 ma; filter, 0.5 mm Cu; distance, 50 cm; dosage, 21 r/min). The oxyhemoglobin dissociation curves and carbon dioxide combination curves before and after irradiation were studied; the hemoglobin concentration, the number of erythrocytes and leucocytes, and the pH of the whole blood were determined. It was found that there are two groups of rabbits: Group I — radiosensitive, and Group II — radioresistant. The animals of Group I died within 24 hrs after exposure; the oxygen content of their blood dropped to 50% of the normal. The animals of

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AID Nr. 996-1 24 June

RESPIRATION FUNCTION OF BLOOD [Cont'd]

S/205/153/003/002/008/024

group II survived for more than 30 days after exposure; the oxygen content of their blood began to decrease only 2 to 3 weeks after exposure and continued to decrease until the animals died. Changes in the shape of the oxyhemoglobin dissociation curve indicate that x-irradiation causes the inflection point of the curve to shift to the right (in the direction of higher partial pressures) because the combination of oxygen and hemoglobin is impeded. The carbon dioxide combination curve also shifts to the right and downwards immediately after exposure, but to a lesser degree than the oxyhemoglobin dissociation curve. In time the rate of the curve drop increases; the pH of the blood decreases appreciably in radiosensitive rabbits and slightly in radioresistant rabbits. The deterioration in the ability of the blood to bind oxygen and carbon dioxide is due, apparently, to damage done to the hemoglobin molecules. Irreversible "internal" hypoxia is induced which causes death of the animals.

[SGM]

Card 2/2

VYSOCHINA, I.V.

Transitional process and reversible annexation of oxygen to
hemoglobin. Biofizika 8 no.3:361-366 '63.

(MIRA 17:11)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

VYSOCHINA, L. D.

U.S.S.R.

1. A semi-micro method of determining sulphur
in organic compounds.

Vyschina, L. D. Zap. Vsesoyuzn. khim. otd.
1954, 1954, 43, 53-55; Referatsnyi Zh., Khim.,
1954, Abstr. No. 11,061.—The compound is hydro-
genated in a porcelain tube containing a platinum
spiral. The tube is heated to 440° C in an electric
furnace and the H₂S produced by 30 to 40 mg of
sample is absorbed in a mixture of 10 ml of 10 per
cent ZnSO₄ with 10 ml of 10 per cent Na acetate
and 1 ml of glacial acetic acid. The completion
of the reaction is indicated by the appearance of a
white precipitate. The precipitate is filtered and the
residue is washed with 10 ml of 10 per cent NaOH.
The filtrate and washings are combined and the
method can be adapted to micro-determinations.
The method is not applicable to compounds con-
taining phosphorus because of catalyst poisoning.
The limits of error are ± 0.3 per cent. By Hayes

VTCCHINA, L.D.

VISNEVSKIY, V.G., arkhitekt; VISOCHINENKO, V.D., inzh.

Sections of administration and general services combines for coal
mines. Shakht. stroi. 8 no.8:11-14 Ag '64. (MIRA 17:9)

1. Gosudarstvennyy institut po proyektirovaniyu shakht v yuzhnykh
rayonakh SSSR.

KHAYKINA, A.S.; DUBRAVINA, G.I.; RACHINSKAYA, A.Z.; PETRENKO, M.D.; MITEL'MAN, P.M.; KHODOROVA, Z.N.; KATS, F.M.; KISELEV, R.I.; GAYDAMAKA, M.G.; VOLOVICH, B.I.; BEKKER, M.L.; GORDIYENKO, Ye.G.; VISOCHINENKO, Ye.K.; TELESHEVSKAYA, M.A.; NAYDEROVA, Yu.T.

Production of the active fraction of hyperimmune horse sera by means of the alcohol precipitation method under a low temperature. Nauch. osn. proizv. bakt. prep. 10:159-167 '61. (MIRA 18:7)

1. Khar'kovskiy institut vaktsin i syvorotok im. Mechnikova.

VYSOCKII, S.

VYSOCKII, S.; KOSTYRIN, P.

Advanced work methods with a shovel-type loader. p. 114 (Mechanizatsiya. Praha. Vol. 2, no. 2/3, Feb./Mar. 1953)

SO: Monthly List of East European Accession, (EFAL), LC, Vol. 4, No. 6, June 1955, Uncl.

VYSOCKY, Zdenek (Ostrava ~ Kuncice)

Lubricating device for moving lubricating points, Ropa a uhlie
4 no.12:378-379 D '62.

VYSOCKY, Z.

Correct organization of lubrication technique, trouble-free operation. Ropa a uhlie 6 no. 3: 91-94 Mr '64.

1. Nova hut Klementa Gottwalda, Plant 3, Ostrava-Kuncice.

VYSOHLID, Josef, MUDr.

Method of improvement of professional qualifications of health workers in the Soviet Union. Cesk. zdravot. 4 no.4:203-209 Apr 56.

1. Nametek ministra zdravotnictvi.
(PUBLIC HEALTH, education,
in Russia (Cs))